



# SECULENE<sup>®</sup> PP: HIGH-QUALITY COMPOUNDS MADE OF RECYCLED PP MATERIALS

ecobat  
RESOURCES

# PROFILE

## LEADER IN ENVIRONMENTALLY FRIENDLY PP COMPOUNDING

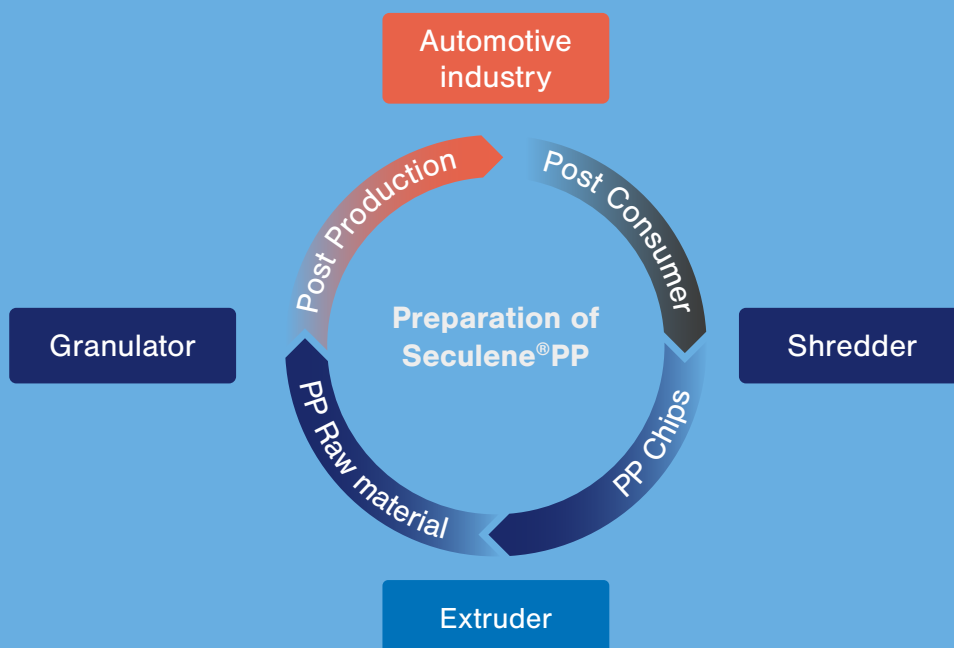
As the European market leader in the production of high-quality polypropylene compounds from secondary materials, the Ecobat Group is a sought-after partner for the automotive and supplier industry. The company operates several plastic extrusion lines for polypropylene (PP) at various locations in Europe. In the United States, we are currently investing in the expansion of our polypropylene business.

The **Seculene®PP** brand compounds produced in the German plants set standards in the world of secondary materials with a focus on automotive applications.

Other plants in Italy and the UK produce **Seculene®PP** and high-quality PP recyclates for non-automotive applications, while the Italian plant's portfolio also includes ABS.

The various types of the **Seculene®PP** brand are developed over many years of continuous research and close cooperation with industry partners and are continuously adapted to the respective requirements. Ecobat qualifies as a future-oriented solution provider thanks to its holistic concepts for closing the PP material cycle - recycling, compounding, distribution and services.

In addition to the process-controlled preparation of PP chips from secondary raw materials, the production of PP compounds according to customer requirements is one of the core competencies of the Ecobat Group. With an annual production capacity of around 100,000 tons of thermoplastics in Europe and the USA, Ecobat opens up pioneering application potential as a competent service provider to the plastics processing industry.



# CUSTOMER BENEFITS

## ADDED VALUE THROUGH INTEGRATED SOLUTIONS

State-of-the-art plastics recycling systems, innovative strength and broad application technology expertise are the parameters for success for holistic, customer-oriented solutions. Integrated consulting expertise means results-oriented service right from the start.

Ecobat actively shapes customer success with customized answers to questions about the composition, use and recycling of plastics, replacement planning of primary material for **Seculene® PP** or tool construction and application.

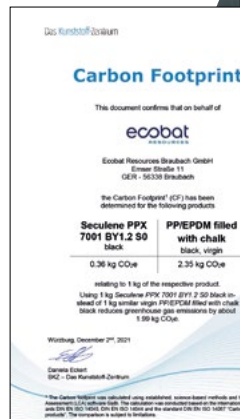
This is also reflected in our high-performance logistics - a decisive performance factor in ensuring smooth production processes through reliable delivery of standard products within a few days.

As a provider of forward-looking solutions for sustainable material cycles, Ecobat is committed to the best possible product quality, adherence to delivery dates, customer orientation and efficient management. With a company-wide management strategy based on targets and key figures, it is facing up to this challenge.



### CERTIFICATIONS

- DIN EN ISO 9001**
- DIN EN ISO 14001 / BS OHSAS 18001**
- Specialist waste management company
- DIN EN ISO 50001**
- UL 94 V0 (Yellowcard)**



# TECHNOLOGY

## THE PREPARATION



In addition to pure polypropylene chips from the company's own battery scrap processing, the base materials for **Seculene®PP** are in particular PP, PP/EPDM and TPO raw materials from post-consumer streams. After intensive multi-stage cleaning, they are crushed to grist in a so-called wet cutting mill. Metal residues are removed in the downstream density separation process.

Dewatering in a mechanical dryer is followed by thermal drying and air separation to remove paper, wood and rubber particles. The clean granulate is then transported pneumatically to the raw material silos for compounding.



1000%

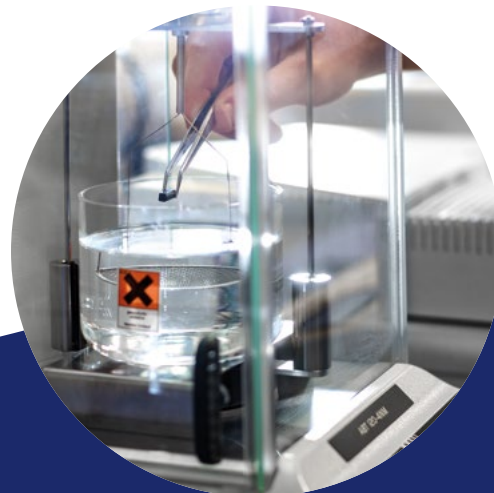
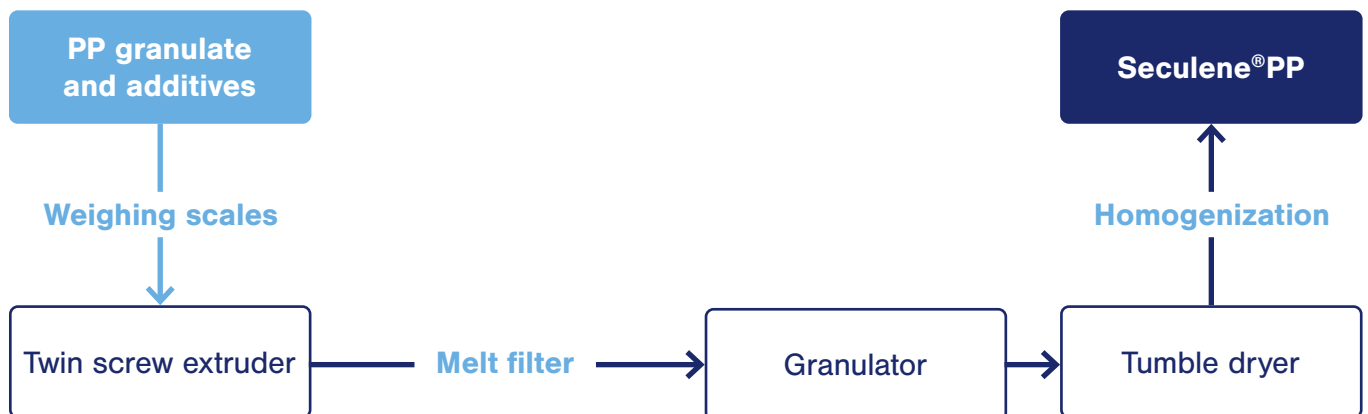




# THE COMPOUNDING

The product parameters are defined during compounding. This is done by incorporating customer-specific product requirements and specifications. Application-specific compound qualities are produced in the individual extrusion lines by adding mineral fillers, process and ageing-stabilizing additives and the blackcoloured carbon black batch.

The seamless, cross-process quality monitoring of all process parameters such as formulation, temperature, pressure or flow behavior ensures a consistently high product level of **Seculene®PP**.



## PRODUCTS & APPLICATION

# MATERIAL MADE TO MEASURE

**Seculene®PP**, produced exclusively from secondary raw materials, is a high-quality branded product. It fulfills requirement-specific properties such as density, impact strength, elongation and flow behavior in almost the same quality as virgin material. Ecobat develops tailor-made **Seculene®PP** compounds at short notice and on a customer-specific basis for special applications as a cost-effective substitute for virgin material. The high and permanently safe product quality of this innovative material underlines the cost-effectiveness of its use.

The automotive and supply industry has long relied on **Seculene®PP** and has integrated Ecobat into the development of new type generations for function-specific applications right from the start. The material has proven its worth as an exterior material in the form of wheel arch liners, underbody cladding or cable ducts, as well as for water deflectors, bumper guides or toolboxes.

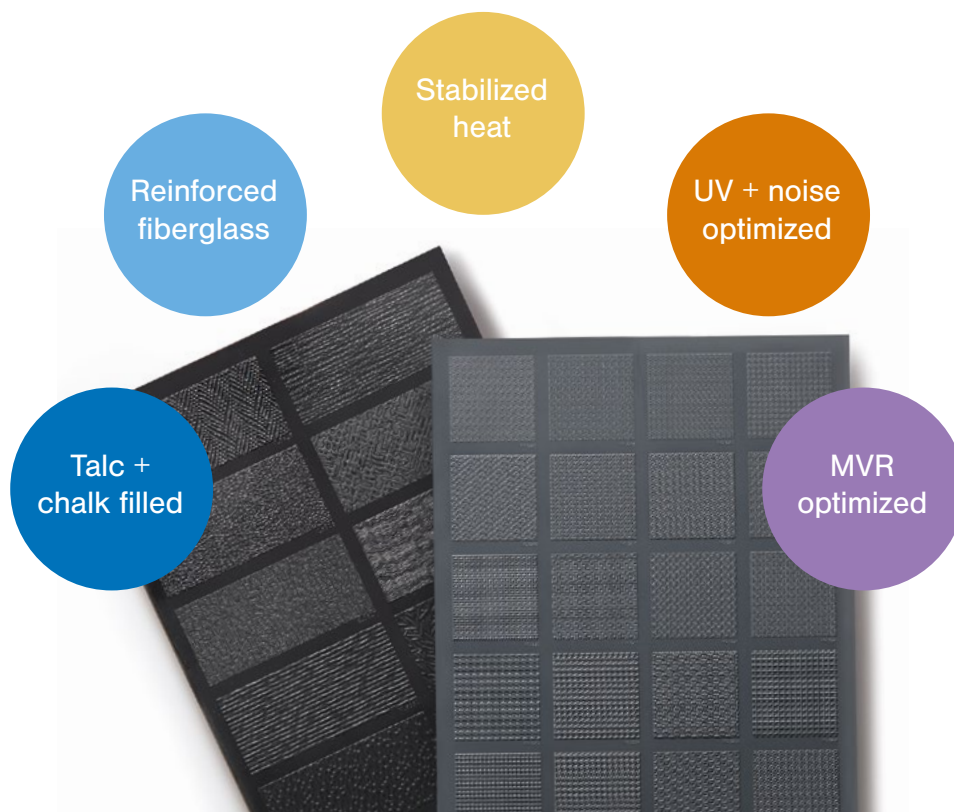
**Seculene®PP** is also becoming increasingly established in interiors. **Seculene®PP** is also successfully used to manufacture housings for starter batteries or accumulators for industrial applications. The thermoplastics produced for the non-automotive sector are primarily used in the construction industry.

Ecobat currently produces more than 30 PP variants.

### SECULENE® PP

#### The range of properties:

- types: PP, PP/EPDM, PP-T, PP-E, PP-GF...
- filling level: minerals 5–40%, glas fiber 5–60%
- MVR 230/2,16: 3–20cm 3/10min
- yield stress: 30MPa max.
- elongation at yield: 35% max.
- notched impact strength: 3–60kJ/m<sup>2</sup>
- heating times at 150°C: >200h–1000h
- UBQ aggregate
- flame-retardant



# TECHNOLOGY & ENVIRONMENT

## RESPONSIBILITY FOR PEOPLE, NATURE AND TECHNOLOGY

With highly efficient technology, consistently optimized processes and innovative products, Ecobat makes a multi-layered contribution to protecting the environment and conserving resources.

The ecological and user-specific processing of PP from recycled material into high-quality PP compounds characterizes Ecobat's holistic concept for closing the recycling loop.

Trained personnel control and monitor environmentally friendly and economical production. The certification as a company with an integrated management system for quality, occupational health and safety, environmental protection and energy efficiency underlines the central importance of performance orientation and a sense of responsibility. This is also documented by the consistently high level of investment in environmental protection measures and occupational health and safety.



Up to 80% CO<sub>2</sub> Savings possible



## LOCATIONS + CONTACT

# LOCAL PRESENCE – INTERNATIONAL IMPACT

Ecobat is a leader in the collection, recycling, production and distribution of resources essential to modern life.

With locations in Europe and the United States, Ecobat forms a huge network that powers industries worldwide.



City of Industry (CA)



Indianapolis (IN)



Middletown (NY)

● HQ Dallas (TX)



Matlock (GB)



Freiberg (D)



● Braubach (D)



Pieve di Cento (I)

### Ecobat Resources

Polypropylene Business

#### ● North America

2121 N. Pearl Street,  
Suite 1400  
Dallas, Texas 75201  
United States

#### ● Europe

Emser Straße 11  
56338 Braubach  
Germany

Contact:

T +49 2627 981-178  
pp@ecobat.com  
**ecobat.com**